744.05 BASIS OF PAYMENT.

Payment will be made at the Contract Unit Price for the following:

Pay ItemPay UnitInsulation BoardBoard Foot (bd.ft.)

This payment will be full compensation for all labor, equipment, and material necessary to complete the work.

SECTION 748 CURB AND GUTTER

748.01 DESCRIPTION.

This work consists of constructing curb, gutter, or combination curb and gutter.

748.02 MATERIALS.

Materials shall meet the following:

Item	Section
Concrete Class AE	802
Materials for Bituminous Curbing	408
Base Material	816
Reinforcing Steel	836
Expansion Joint Material	826.02 C or
-	826.02 D
Joint Materials	826
Curing Materials	810

748.03 CONSTRUCTION REQUIREMENTS.

A. Cast-in-Place Concrete Curb and Gutter.

- 1. **Equipment.** Curb and Gutter shall be constructed using a slip-form machine or fixed forms. Fixed forms shall be full depth.
- 2. **Excavation.** The area for placing the curb shall be compacted to a firm, even surface. All soft and unsuitable material shall be removed, replaced, and compacted with suitable material.
- 3. **Base.** A base aggregate, when specified, shall be placed to the required section and uniformly compacted.

4. Mixing, Placing, and Finishing. Concrete shall be proportioned and mixed according to Section 802. The foundation shall be thoroughly moistened before placing concrete. The concrete shall be consolidated by vibration. The concrete shall be struck off to the proper cross section. The exposed surfaces shall be floated with a moistened wood float until all irregularities have been removed. The final surface finish shall be obtained by uniformly brushing the surface. Side forms shall be left in place until the concrete has hardened enough for form removal without damaging the concrete.

All honeycombed surfaces shall be corrected by using a mortar composed of one part cement and 2 parts sand. Severely honeycombed areas shall be removed and replaced.

The top and face of curbs shall be checked with a 10-foot straightedge and all variations greater than 1/4 inch in 10 feet shall be corrected before the final finish. If the curb cannot be corrected, out-of-tolerance sections shall be replaced at the Contractor's expense.

- Joints and Joint Sealing. All joints shall be formed and placed at the specified intervals. When constructed adjacent to concrete pavement, joints shall match the pavement joints. Joint sealing shall be as specified.
- Curing. Concrete shall cure for 72 hours. All surfaces not protected by forms during this period shall be covered with a curing compound.
- Backfill. After the concrete has set sufficiently, the spaces in front and back
 of the curbing shall be filled and compacted to the required elevation with
 suitable material.
- 8. **Operational Limits.** Operational limits shall meet Section 602.03 G.

B. Precast Concrete Curbing.

- 1. **Excavation.** Excavation shall meet Section 748.03 A.2.
- 2. **Base.** Base shall meet Section 748.03 A.3.
- 3. Installation. Precast curbing shall be laid on a uniform bedding true to line and grade. Care shall be taken so the dowels are free in the pipe sleeves and the weight of the unit is carried by the bedding and not by the dowels.

Units which are broken, cracked, or otherwise damaged will not be accepted.

- 4. **Surface Finish.** The surface shall meet Section 748.03 A.4.
- Joints. All joints shall be formed according to the Plans or as otherwise directed.
- Backfill. After the curb has been set to line and grade, the spaces in front and back of the curbing shall be filled and compacted to the required elevation.

C. Bituminous Curbing.

- 1. **Excavation.** Excavation shall meet Section 748.03 A.2.
- Base. Base shall be placed as shown in the Contract. After the base has been uniformly compacted, a prime coat shall be applied of the type, grade, and amount specified.
- 3. Preparation of Bed. The area on which the curbing is placed shall be thoroughly cleaned of all objectionable foreign materials. The surface shall be thoroughly dried. Before placing the bituminous mixture, it shall receive a tack coat of bituminous material of the type, grade, and amount specified on the Plans or as directed. The tack coat may be eliminated on a freshly primed base if approved by the Engineer.
- Placing. Bituminous curbing shall be constructed so the required cross section is produced and a uniform texture, shape, and density is obtained.
- Painting and Sealing. When sealing or painting is required, it shall be performed only on a curbing which is clean and dry, and only under conditions approved by the Engineer.
- Backfill. The spaces in front and back of the curbing shall be filled to the required elevation with suitable material and compacted to the satisfaction of the Engineer.

748.04 METHOD OF MEASUREMENT.

- A. Curbing. Curbing will be measured by the Linear Foot along the front face of the section at the finished grade elevation. Combination curb and gutter will be measured along the face of the curb. No deduction in length will be made for drainage structures installed in the curbing.
 - Where the curb is dropped through a concrete driveway, the curb and gutter measurement will be made as if the curb continued through the driveway.
- B. **Reinforcing Steel.** This item will not be measured for payment but shall be included in the unit price for curb.
- C. Base Material. This item will be measured by the Ton or by the Cubic Yard according to Section 109.

748.05 BASIS OF PAYMENT.

Payment will be made at Contract Unit Prices for the following:

Pay Item	Pay Unit
Curb Type	Linear Foot
Gutter Type	Linear Foot
Curb and Gutter Type	Linear Foot
Base Material	Ton or Cubic Yard
Curb and Gutter Type I Reinforced	Linear Foot
Curb and Gutter Type II	Each

Excavation costs shall be included in the price bid for Curb, or Curb and Gutter.

This payment will be full compensation for all labor, equipment, and materials necessary to complete the work.